

**Agency Priority Goal** | Action Plan | FY 2022 – Q2

# Maintaining High-Performing Core Assets

## **Goal Leaders**



Stephanie Pollack, Deputy Administrator, Federal Highway Administration (FHWA)



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Associate
Administrator for
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Aviation Administration
(FAA)

## Goal Overview

#### **Goal statement**

Improve the condition/performance of Federally funded portions of the Nation's transportation systems. By September 30, 2023, the percentage of Interstate Pavement in either good or fair condition will be maintained at 95%; the percentage of deck area on National Highway System (NHS) bridges in either good or fair condition will be maintained at, or above 95%; the percentage of person-miles traveled on the interstate that are reliable will be at or above 82.8%; and the percentage of paved runways in the National Plan of Integrated Airport Systems in excellent, good, or fair condition will be maintained at 93%.

### **Problem to Be Solved**

Transportation is the backbone of the American economy and shapes the daily lives of people across the country. From the earliest days of the Administration, President Biden promised the American people a transformational investment in infrastructure Congress responded to the President's call with the Bipartisan Infrastructure Law (BIL), or the Infrastructure Investment and Jobs Act, which President Biden signed into law on November 15, 2021. This landmark legislation authorizes \$660 billion for DOT for better bridges and roads, electrifying buses, installing electric vehicle chargers, laying track, and so much more. Since the passage of BIL, we are now in the early stages of a generational modernization of our infrastructure that will create jobs, boost our domestic manufacturing, and bolster our economic security and prosperity for decades to come.

To strengthen the Nation's economy and global competitiveness, DOT is working to help grow inclusive and sustainable economy. Investing in our nation's transportation system provides American workers and businesses reliable and efficient access to resources, markets, and goodpaying jobs. DOT is providing resources to restore and modernize transportation core assets to improve the state of good repair, enhance resiliency, and expand beneficial new projects. DOT is also working to improve transportation system operations to increase travel time reliability, manage travel demand, and improve connectivity.

#### **FHWA**

The Bipartisan Infrastructure Law provides the basis for FHWA programs and activities through September 30, 2026. It makes a once-in-a-generation investment of \$350 billion in highway programs. This includes the largest dedicated bridge investment since the construction of the Interstate Highway System.

### **Interstates and Bridges**

 FHWA focuses on maintaining Interstate pavement and bridges in at least good or fair condition. Highway pavement and bridges that are classified as being in poor condition<sup>1</sup> directly impact people's lives by increasing the wear and tear on vehicles, driving up repair costs, inflating travel times, and potentially causing safety concerns.

## **Travel Time Reliability**

Travel time reliability is a key indicator of transportation system performance. For this APG, FHWA measures the percentage of person-miles traveled on the Highway Interstate System that are considered reliable. A reliability measure represents the amount of time variability that would need to be added to a trip, for example, a typical commuter to make it on time to work 16 out of 20 workdays a month. For this reliability measure, the number of additional minutes needed for the commute would be more than 50% of the typical time (i.e., for a typical 20-minute commute, 10 minutes or more additional time would need). It also reflects the amount of travel that is unaffected by highly variable travel times. Typically, there is a two-year lag in data availability and of conflation to the National Performance Management Research Data Set (NPMRDS) location referencing network with the Highway Performance Monitoring System (HPMS) data. For example, the FY 2021 travel time data were conflated with FY 2019 Highway Performance Monitoring System (HPMS) data.

#### **FAA**

FAA ensures that runway pavements are maintained in a state of fair condition or better, as
this is a critical component of a safe National Airspace System. Timely maintenance
activities reduce life-cycle costs and extend pavement life, avoiding unnecessary costs for
reconstruction and major rehabilitation, as well as delays due to long-term runway closures.

<sup>&</sup>lt;sup>1</sup> For more information on what constitutes poor condition please see: https://www.fhwa.dot.gov/tpm/faq.cfm#brid

### **What Success Looks Like**

#### **FHWA**

## **Interstates and Bridges**

- For FHWA, success in achieving this APG means that at least 95% of Interstate pavement are maintained in Good and Fair condition, and at least 95% of the deck area on NHS bridges are maintained in Good and Fair condition.
- O Working with State and local stakeholder agencies, the Department has established a framework of National performance measures for NHS pavement conditions. As part of this approach, States are required to make significant progress towards achieving targets for these performance measures, with the State-by-State results reported nationally. States not meeting or making significant progress toward the national performance measures are required to document in the next State Biennial Performance Report the actions they will take to achieve targets for all measures in the measure area.<sup>2</sup>The Department will support States in their efforts to maintain or improve the condition of NHS pavements and bridges.

## **Travel Time Reliability**

 APG achievement also means ensuring that travel time on the Interstate system remains as reliable as possible for drivers and passengers. Travel times are considered unreliable if they require greater than 50% more than the normal travel time during one or more of four time periods (6am-10am, 10am-4pm, 4pm-8pm weekdays and 6am-8pm weekends) over the course of a year.

<sup>&</sup>lt;sup>2</sup> For more information on the consequences of not making significant progress please see www.fhwa.dot.gov/tpm/guidance/hif21030.pdf

### **FAA**

Ensuring that at least 93% of runways in the National Plan of Integrated Airports (NPIAS)
remain at fair or better condition allows the Department to advance toward its strategic
objective of maintaining high-performing core assets. This is accomplished through properly
investing in maintenance and rehabilitation at the appropriate points in the lifecycle of
runway pavement.

# **Goal Targets**

Achievement statement		Key indicator(s)	Quantify progress			Frequency	
Ву	We will	Name of indicator	Target value	Starting value*	Current value	Update cycle	
09/30/23	Ensure the percentage of Interstate Pavement in either good or fair condition will be maintained at 95%; the percentage of deck area on National Highway System (NHS) bridges in either good or fair condition will be maintained at, or above 95%; the percentage of person-miles traveled on the interstate that are reliable will be at or above 82.8%; and the	Percentage of Interstate Pavement, in Lane Miles, in either Good or Fair Condition (FHWA)	95.0%	99.2%	99.2%*	Annually, on June 15^	
		Percentage of Deck area on NHS Bridges in either Good or Fair Condition (FHWA)	95.0%	95.8%	95.8%*	Annually, on June 15^	
		Percentage of person-miles traveled on the interstate that are reliable (FHWA)	82.8%	83.7% (CY 2018 baseline)	93.9%**	Annually, in September for the previous year	
	percentage of paved runways in the National Plan of Integrated Airport Systems in excellent, good, or fair condition will be maintained at 93%	Percent of Paved Runways in the National Plan of Integrated Airport Systems in Excellent, Good, or Fair Condition (FAA)	93%	97.8%	97.6%***	Quarterly	

<sup>\*</sup>As of October 1, 2021.

<sup>\*\*</sup>As of 2020, which is the most recent available data.

<sup>\*\*\*</sup>Actual as of March 31, 2022.

<sup>^</sup>Annually on June 15. For example, data received on June 15, 2022 will cover the data from CY 2021.

## Goal Team

# **Pete Buttigieg**

**DOT Secretary** 

**Billy Nolen**FAA Acting Administrator

**Stephanie Pollack** FHWA Deputy Administrator

#### **Senior Lead**

Thomas D. Everett
FHWA Executive Director

#### Leads

Hari Kalla

WA Associate Administrator (AA for Infrastructure

Martin Knopp

FHWA Associate Administrator (AA for Operations

#### **Senior Lead**

**Shannetta Griffin** FAA AA for Airports

#### Lead

FAA Deputy AA for Airports

## Goal Strategies

#### **FHWA**

## **Pavement and Bridge Strategies**

FHWA supports asset-management planning to improve or preserve the condition and performance of NHS pavements and bridges. FHWA accomplishes this by encouraging preservation and resilience activities; promoting innovative maintenance strategies; engaging in research, development, and deployment activities related to lifecycle management and infrastructure preservation; and providing education, training, and technical assistance to help State and local stakeholders implement Transportation Performance Management and asset management principles and practices.

## **Travel Time Reliability Strategies**

OFHWA has numerous efforts, both planned and underway, to support the State Departments of Transportation and metropolitan planning organizations (MPO) calculation and target setting, which is the basis for this measure. FHWA also works to ensure the availability of data used to calculate the reliability measure via a new NPMRDS agreement awarded in May 2022, and has developed technical assistance papers on "Approaches to Target Setting" and "Forecasting for Target Setting" (to be published in FY 2022) in response to stakeholder needs regarding implementing Transportation Performance Management requirements<sup>3</sup>. Additionally, FHWA plans to aggregate data in a monthly operations dashboard to provide simple-to-understand trends for average travel times and reliability on the Interstate System in Fall 2022.

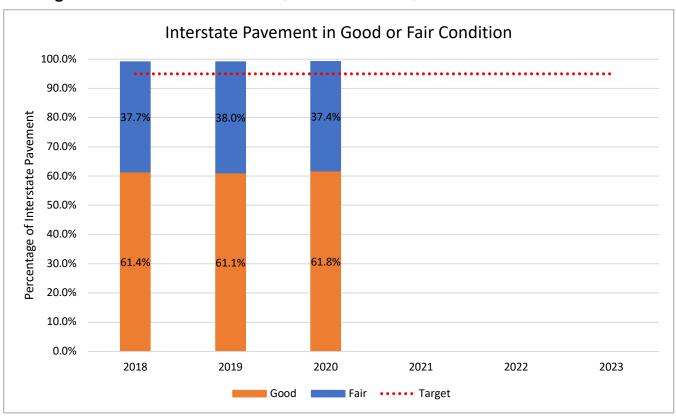
<sup>&</sup>lt;sup>3</sup> For more information on Transportation Performance Management requirements: https://www.fhwa.dot.gov/tpm/policy/index.cfm

#### FAA

- FAA implements a variety of data collection and analysis strategies to maintain the percentage of paved runways in the NPIAS in excellent, good, or fair condition at 93 percent. It uses both scheduled and unscheduled surveillance safety inspections at Part 139 certificated airports to assess pavement conditions and collects safety and pavement condition data under a contract program to inspect non-certificated public use airports every three years.
- FAA also maintains a five-year, forward-looking analysis of airport capital improvement needs that includes runway pavement rehabilitation, which is published in the biennial NPIAS report. Federal Grant Assurances require airports to implement an effective pavement maintenance management program at Federally obligated airports.

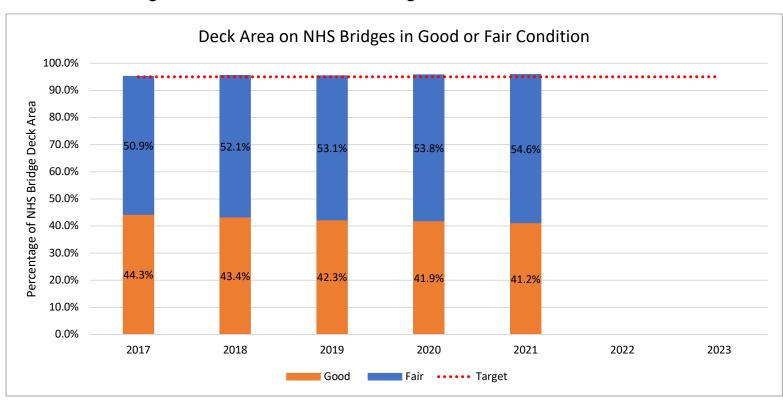
## **Key Indicators (Interstate Pavement Condition)**

Percentage of Interstate Pavement, in Lane Miles, in either Good or Fair Condition



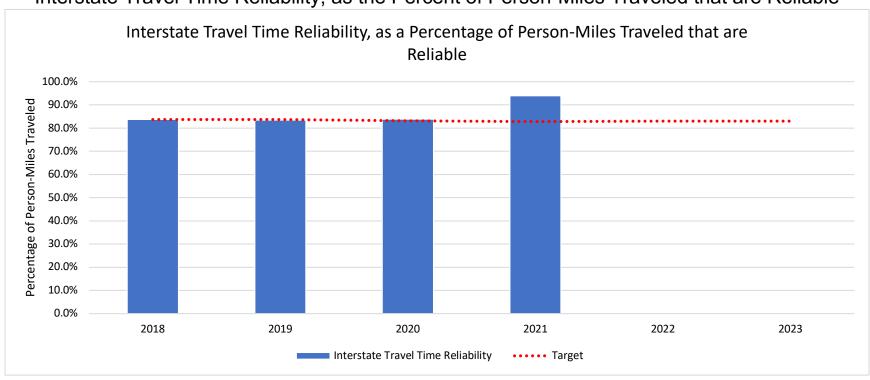
## Key Indicators (Deck Area Condition)

Percentage of Deck area on NHS Bridges in either Good or Fair Condition



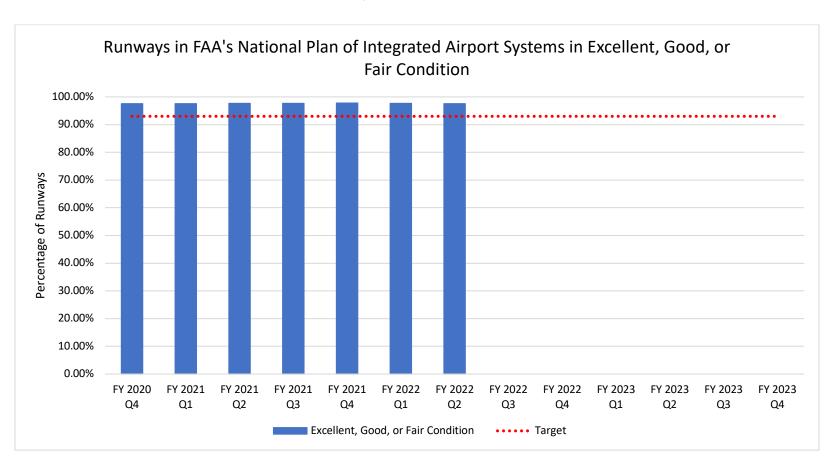
# Key Indicators (Travel Time Reliability)

Interstate Travel Time Reliability, as the Percent of Person-Miles Traveled that are Reliable



## **Key Indicators (Runway Pavement Condition)**

Percent of Paved Runways in the National Plan of Integrated Airport Systems in Excellent,
Good, or Fair Condition



# Key Milestones (FHWA)

Milestone Summary						
Key Milestone	Milestone Due Date	Milestone Status	Change from last quarter	Owner	Comments	
State DOTs must submit their pavement condition data to FHWA	Q2, FY 2022	On-Track		FHWA AA for Infrastructure	All States DOTs met the April 15 <sup>th</sup> deadline to submit pavement condition data for determining the Condition of Interstate Pavement penalty (23 U.S.C.119(f)(1)). FHWA is processing the data and will make final determinations by October.  To improve pavement condition, FHWA administers a pooled fund study, which leverages FHWA and State DOTs contributions to implement innovative pavement technologies, provides education and technical support via the mobile technology pavement centers, and hosts webinars and peer exchanges to address pavement data collection, analysis, and management. FHWA is also finalizing a Notice of Proposed Rulemaking that will outline proposed changes to the requirements for pavement design.	
States, Federal agencies, and tribal governments submit their	Q2, FY 2022	Complete			All States, Federal agencies, and tribal governments met the March 15 deadline to	

bridges' Structure Inventory and Appraisal data to FHWA for inclusion into the National Bridge Inventory					submit their bridges' Structure Inventory and Appraisal data to FHWA for inclusion into the National Bridge Inventory for determining the Condition of NHS Bridges penalty (23 U.S.C.119(f)(2)). FHWA is processing the data and will archive and publish the dataset on June 15.  To support highway bridge condition improvements, FHWA holds bridge preservation and bridge management workshops and peer exchanges, provides technical assistance to bridge owners, and promotes effective technologies and innovations that may be underutilized.
Bridge Formula Program		Complete	Apportioned \$5.3B of FY 2022 funds to States via statutory formula.	FHWA AA for Infrastructure	Funding from advanced appropriations included in the Bipartisan Infrastructure Law.
Bridge Replacement and Rehabilitation Program		Complete		FHWA AA for Infrastructure	Funding from the FY 2022 Consolidated Appropriations Act.
Publish National Bridge Inspection Standards (NBIS) Final Rule	Q3, FY 2022	Complete	Published Final Rule in Federal Register (5/6/2022)		This rule and its incorporated references represent the most sweeping changes to the regulation since it was first enacted on April 27, 1971. Full implementation of the revised NBIS and updated National Bridge Inventory (NBI) is expected to take 4 to 6 years
FHWA is funding two projects to better link operational strategy evaluations with the	September 20, 2023	On-Track		FHWA AA for Operations	State DOTs have a June 15 due date to submit their annual travel time metrics for the reliability and other third performance

Performance Measures 3 (PM3)		management rule travel-time based
measures for use by State DOTs		measures.
and MPOs in their investment		
decision making to be completed		Two technical assistance papers on
in FY 2023		"Approaches to Target Setting" and
		"Forecasting for Target Setting" are
		expected to be published in FY 2022.

# Key Milestones (FAA)

Milestone Summary					
Key Milestone	Milestone Due Date	Milestone Status	Change from last quarter	1 -	Comments
Maintain the target of at least 93 percent of runway pavement in excellent, good, or fair condition for the paved runways in the NPIAS	FY 2022 Q4	On-Track	N/A	Snannetta Griffin, Associate Administrator	Evaluation of the network level of inspection of over 4,300 runways is reviewed and reported monthly. For Q2 FY 2022, the status condition of runways in excellent, good, or fair condition was 97.6%, which is a statistically insignificant change from the previous quarter.

## Narrative—FY 22 Q2

### **FHWA**

State DOTs are required to submit pavement condition data for determining the Condition of Interstate Pavement penalty (23 U.S.C. 119(f)(1)) by April 15 of each year. All State DOTs met the April 15<sup>th</sup> due date to submit their pavement condition data to FHWA. The 2021 data will be available in Q4 FY 2022. FHWA uses the data to determine the percentage of Interstate pavements in either Good or Fair condition. To improve pavement condition, FHWA administers a pooled fund study, which leverages FHWA and State DOTs contributions to implement innovative pavement technologies, provides education and technical support via the mobile technology pavement centers, and hosts webinars and peer exchanges to address pavement data collection, analysis, and management. FHWA is also finalizing a Notice of Proposed Rulemaking to receive public comment on proposed changes to the regulation that outlines requirements for pavement design.

States, Federal agencies, and Tribal governments submit their bridges' Structure Inventory and Appraisal data to FHWA for inclusion into the National Bridge Inventory by March 15 each year. From these submissions, FHWA uses the data to classify highway bridges as in Good or Fair condition. All States, Federal agencies, and Tribal governments met the March 15 due date to submit their Structure Inventory and Appraisal data to FHWA. After FHWA processes, finalizes, archives, and publishes the new data, FHWA will calculate a 2022 data point to measure the percentage of deck area on National Highway System (NHS) Bridges in Good and Fair condition and implement the condition of NHS bridges penalty (23 U.S.C.119(f)(2)). To support highway bridge condition improvements, FHWA holds bridge preservation and bridge management

workshops and peer exchanges, provides technical assistance to bridge owners, and promotes effective technologies and innovations that may be underutilized.

FHWA published the final rule for the National Bridge Inspection Standards (23 CFR 650) on May 6, 2022. This rule and its incorporated references represent the most sweeping changes to the regulation since it was first enacted on April 27, 1971. As such, full implementation of the revised NBIS and updated National Bridge Inventory (NBI) is expected to take 4 to 6 years

The NPMRDS data for CY 2021 was delivered on-time for State DOTs to send in their annual travel time metrics for the reliability and other third performance management rule, or PM3, travel-time based measures. The metrics are due June 15, 2022, after which FHWA will calculate the measures. A new NPMRDS agreement was awarded in May. FHWA plans to aggregate data in a monthly operations dashboard to provide simple-to-understand trends for average travel times and reliability on the Interstate System in Fall 2022.

### **FAA**

The FAA implements a variety of data collection and analysis strategies to maintain the percentage of paved runways in the National Plan of Integrated Airport Systems (NPIAS) in excellent, good, or fair condition at 93 percent. The Airport Engineering Division of the Office of Airports Safety and Standards analyzes the condition of all runways in the NPIAS on a monthly basis. The Airport Engineering Division provides a monthly condition report to each Region summarizing the runway conditions. This report includes a recommendation to take necessary actions to ensure pavement conditions for eligible runways continue to be in Fair or better condition. As of FY 2022 Q2, 97.6% of all runways in the NPIAS were in excellent, good, or fair condition exceeding the goal.

The FAA also maintains a five-year, forward-looking analysis of Airport Capital Improvement Program (ACIP) needs that includes runway pavement rehabilitation, which is published in the biennial NPIAS report. Federal Grant Assurances require airports to implement an effective pavement maintenance management program at federally obligated airports. The FAA actively engages with airport sponsors to identify runways requiring rehabilitation or reconstruction to ensure they are addressed in the next ACIP.

## Data Accuracy & Reliability

The <u>Performance Data Completeness and Reliability Report</u>, which is appended to the FY 2021 Annual Performance Report, provides detailed information on the performance indicators contained within this APG Action Plan.

The Performance Data Completeness and Reliability Report provides detailed information regarding the general accuracy, reliability, validity, completeness, and scope of the performance indicators listed below. The table below lists the page numbers of where each supporting performance indicator can be found in the report.

FY 2021 Performance Indicator	Location
Percentage of Interstate Pavement, in Lane Miles, in either Good or Fair Condition	<u>Pg. 67</u>
Percentage of Deck area on NHS Bridges in either Good or Fair Condition	<u>Pg. 66</u>
Interstate Travel Time Reliability, as the Percent of Person-Miles Traveled that are Reliable	<u>Pg. 72</u>
Percent of Paved Runways in the National Plan of Integrated Airport Systems in Excellent, Good, or Fair condition	<u>Pg. 68</u>

## Additional Information (FAA)

### **Contributing Programs**

- Airport Improvement Program (AIP)
- Passenger Facility Charge (PFC)
- Bipartisan Infrastructure Law (BIL)

### **Organizations**

- FAA Office of Airports: Federal assistance program: AIP and BIL
- Local Airport Authority, FAA: Passenger Facility Charge (PFC) programs
- State Authority: State Airport funding program
- Local governing body: Local Funding programs

## **Regulations**

- Regulations: 14 CFR 139 (Airports with commercial service)
   Policy: 49 USC Chapter 471
- Regulations: 14 CFR 139 (Airports with commercial service)
   Policy: 49 USC Chapter 475

### **Program Activities**

- The Office of Airport Planning and Programming (APP) provides policy and guidance supporting the execution of financial assistance programs for eligible airports.
- The Office of Airport Safety and Standards (AAS) provides guidance on analysis of runway conditions and technical support related to the design and construction of airport pavements.

## **Stakeholder / Congressional Consultations**

• The FAA's Office of Airports, at the headquarters level, considers views and suggestions for airport system-wide development from all its stakeholders, including individual airport owners, FAA's Airports Regional and District Offices, the Air Traffic Organization, the Flight Standards Office, Congress, State aeronautical agencies, State and Local Governments, and other aeronautical user groups.

## Additional Information (FHWA)

### **Contributing Programs**

- National Highway Performance Program (23 USC 119)
- National Goals and Performance Management Measures (23 USC 150)
- National Freight Policy (23 USC167)
- National Bridge Inspection Program
- National Highway Performance Program
- Surface Transportation Block Grant Program
- Competitive Highway Bridge Program
- Bridge Replacement and Rehabilitation Program
- Bipartisan Infrastructure Law (BIL): Bridge Formula Program
- BIL: Bridge Investment Program
- Transportation Performance Management

### **Organizations**

- FHWA Division Offices
- State Departments of Transportation
- Metropolitan Planning Organizations

### Regulations

- Regulations: 23 CFR 650 Subpart C, National Bridge Inspection Program
- 23 CFR 490.300 Subpart C, 23 CFR 490.400 Subpart D, and 23 CFR 490.500 Subpart E— National Performance Management Measures to Assess Condition/Performance of the National Highway System

### **Program Activities**

- The FHWA Office of Bridges and Structures conducts field reviews each year to ensure accurate and consistent condition data for highway bridges is being reported by the State Departments of Transportation.
- The Office of Preconstruction, Construction, and Pavements reviews pavement condition data and provides technical assistance to ensure accurate for highway pavements is being reported by the State DOTs.
- State DOTs send in their annual travel time metrics for the reliability and other third performance management rule travel-time based measures.
- The Office of Operations plans to develop a monthly operations dashboard to provide simple-to-understand trends for average travel times and reliability on the Interstate System.

## Stakeholder / Congressional Consultations

Stakeholder engagement is a critical part of what FHWA does every day to deliver the
Federal Highway Program. It is performed via technical assistance, training and educational
development and delivery, and serving on technical panels for research, development, and
deployment. Programs and resources are developed and enhanced to meet stakeholder
and customer needs informed by surveys, data collection and analysis, participation in
national and regional conferences, responses to requests for technical assistance, and by
the day-to-day conduct of our work.